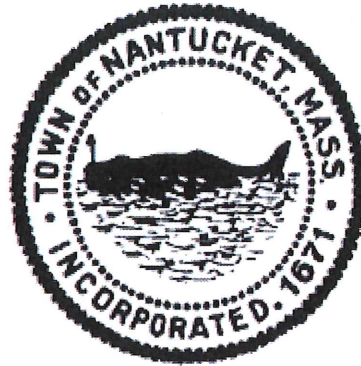


# TOWN OF NANTUCKET



## **Sewer Project Update Frequently Asked Questions**

*As of 03/01/16*

*Updated as of March 25, 2016*

*These FAQs will be updated and re-issued as/when additional information is made available*

---

### **1. What is the sewer project that is before the voters for the April 2, 2016 Annual Town Meeting?**

At the Town Meeting, voters will be asked to approve funding for one sewer project with two phases as well as to add the parcels to be sewered by the project into the Town Sewer District. The sewer project includes the following Needs Areas from the Comprehensive Wastewater Management Plan Update <http://www.nantucket-ma.gov/259/Wastewater-Action-Plan>.

Phase 1 - Nantucket Harbor Shimmo (formerly known as "Monomoy")\*

Phase 2 - "Plus" parcels\* (various areas that are within or directly abut the Town Sewer District that had been left out of the District in error at some point in time) (nothing to do with the "PLUS" department)

*\*(See map attached on the last page of this Handout that details these geographic areas)*

There are two warrant articles relating to this project: Article 18 seeks approval to borrow the funds needed to design and construct the project. Article 19 will require Town Meeting approval to add all of the properties in the above areas into the Town Sewer District. The Town Sewer District is the area served by the Surfside Wastewater Treatment Facility.

*NOTE: Phase 1 above is called "Monomoy" in all previous documents, maps and reports and has been renamed "Nantucket Harbor Shimmo" to more accurately reflect the geographic area that it encompasses, which includes Brewster Road to the southwest to Gardner Road on the northeast and Kelley Road to the south across to Nantucket Harbor.*

### **2. How much is this project going to cost?**

The CWMP Update planning level costs are shown below. These have been compared to current costs with reviews done through the most recent Engineering News Record (ENR)

index. As the Town moves forward to design and construction, these costs will be further refined. Final costs are determined when the project is complete and all bills are in.

Nantucket Harbor Shimmo (Phase 1)

Design	\$2,782,916
Construction	\$25,046,246
Total	\$27,829,162

“Plus” (Phase 2)

Design	\$1,309,821
Construction	\$11,788,385
Total	\$13,098,206

Total both Phases combined: \$40,927,368

**3. *How is this project proposed to be paid?***

The Commonwealth of Massachusetts has a State Revolving Fund (SRF) Loan Program that provides a low (or zero percent) interest loan to Commonwealth municipalities for eligible water quality projects that are primarily for nutrient reduction. The sewer project on the 2016 Annual Town Meeting Warrant is a proposed nutrient removal project for Nantucket and Polpis Harbors as a solution to the “Total Maximum Daily Loads” (TMDLs) which have been issued in these locations and this qualifies the Town for the zero percent loan program. TMDL is a regulatory term in the U.S. Clean Water Act, describing a value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards. All SRF loans cover the construction costs, but do not cover any design costs -- these must be paid by the Town. The Town has applied for and received approval of its application for SRF monies for the construction portion of the project on the Town Meeting Warrant. Eligible project costs would be funded through the SRF loan with loan payments up to 30 years. The non-eligible costs of design are paid by the Town. The capital cost recovery of all costs is proposed to be paid through a combination of betterment assessments and the general tax base (all taxpayers).

Betterments would be assessed to all properties that will be “bettered” or directly benefit from the extension of municipal sewer. The Town is proposing to issue betterments under Massachusetts General Laws Chapters 80 and 83, which allow the Town to construct and maintain sewers for public health and convenience and assess the cost of such to those receiving the benefit. The Board of Selectmen and the Finance Committee at a joint meeting on February 29<sup>th</sup>, voted to recommend a “25-75” cost share, with the “bettered” properties to cover 25% of the cost and the general tax base to cover 75%. The general tax base share requires Town Meeting approval and approval by ballot question.

**4. *What is a betterment?***

“A betterment or special assessment is a special property tax that is permitted where real property within a limited and determinable area receives a special benefit or advantage, other than the general advantage to the community, from the construction of a public improvement.” *Definition from: “Massachusetts Department of Revenue Division of Local Services, Betterments and Special Assessments”.*

In Nantucket's case the public sewer proposed for the two areas listed above will be assessed upon the parcels, both developed and undeveloped. For these projects, the betterment assessment is proposed to be based on the Uniform Unit Method.

Although General Laws c. 80 does not restrict the method of apportioning betterments for general betterments such as roadway improvements, Chapter 83 of the General Laws provides only two methods of apportioning betterments for sewer projects (G.L. c. 83, s. 15). The first method is the uniform unit method, where the Town establishes a sewer unit equal to a single family residence or a specific number of bedrooms in a dwelling unit. The total cost of the project to be paid by the users is then divided by the number of existing and potential sewer units to be served. By law, the Town is required to assess all existing and potential sewer units. For non-residential units, the number of sewer units for a particular use is determined on the basis of residential equivalents (Title 5 Flows).

The second method of sewer assessments allowable under the General Laws is the so-called fixed uniform rate based on the frontage of such land on any way in which sewers are constructed, the area of such land within a fixed depth from such way, or a combination of both frontage and area. The fixed uniform rate is more likely to reflect the taxable value of the parcel, whereas the uniform unit method is based on the anticipated sewer use from each parcel. Therefore, although the Town cannot apportion sewer betterments based directly on the assessed value of real property, the Town could apportion sewer betterments based on land area, for example. The practical difference between an apportionment on the basis of land value rather than land area appears to be inconsequential as the Finance Director has indicated that using either method does not appreciably change the amount or range of betterments for each property, except for a limited number of large parcels where the betterment actually increases if land area is used.

Most municipalities use the uniform unit method for calculating betterments because such method more fairly allocates costs based on actual sewer use rather than on frontage or area (which roughly translates to land value) without regard to actual sewer use. The frontage and/or area method can potentially result in a disproportionate betterment assessment for certain properties.

***5. Which Town body determines the percentage of project costs for a sewer project will paid by taxpayers and what percentage by the sewer users, and which body determines the method of assessment?***

Section 6 of the Nantucket Sewer Act (c. 396 of the Acts of 2008) states that Town Meeting determines the percentage of costs to be paid by the Town (the remaining percentage is paid by the sewer users). Although section 6 also says that the Town, acting through its Sewer Commissioners, "may avail itself of any or all methods permitted by the General Laws relative to assessments," a different paragraph in the same section states that "at the same meeting at which town meeting determines that any portion of the cost is to be borne by the Town, it may by vote determine by which of such methods the remaining portion of said cost shall be provided for."

Town Meeting, therefore, must vote to establish the percentage of the total project cost to be paid by the taxpayer and may determine the method of assessment of betterments. If the Town Meeting vote is silent on the method of assessment, then it is up to the Sewer Commissioners to determine the method.

**6. *What is the estimated betterment cost?***

The estimated betterment cost differs by project area (because of the cost difference per project). All single family 4-bedroom\* residential units will be assigned 1 SEU. Those properties that have or could have a second residential dwelling unit will be assigned an additional .5 SEU.

Nantucket Harbor Shimmo

\$20,300 - (primary residential dwelling = 1 SEU)

\$10,150 - (secondary residential dwelling = .5 SEU)

Total estimated betterment in Nantucket Harbor Shimmo based on current zoning with 1.5 SEU = \$30,450 (numbers slightly rounded)

Plus

\$11,800 - (primary residential dwelling = 1 SEU)

\$5,900 - (secondary residential dwelling = .5 SEU)

Total estimated betterment in Plus based on current zoning with 1.5 SEU = \$17,700 (numbers slightly rounded)

The final betterment cost will be determined after construction is completed (2018/19 for Nantucket Harbor Shimmo and 2020/21 for Plus) and will be based on actual documented project costs within 6 months of project completion. The final betterment value cannot exceed the value voted at the hearing at which estimated betterments are approved. Betterments are assessed against and run with the property and not against the individual.

*\*the number of bedrooms upon which the SEU is based is subject to continuing discussion by the Board of Selectmen; however, the current betterment assessments are based on 4-bedrooms being the equivalent of a single family dwelling*

**7. *I own a property in one of the two areas proposed for sewer. What will this project cost me?***

In addition to a betterment the following fees would apply (these fees apply now, to anyone connecting to sewer):

- a. **House connection** – Includes costs of permitting and installing your house connection to the sewer pipe in the road (also includes decommissioning of your septic system; landscaping; property restoration) – estimated at up to \$20,000 depending on several factors including extent of landscaping, location of septic system.
- b. **Sewer connection fee** -- \$500 - \$2,000, the Town's standard charge for a connection to the sewer line to cover administrative costs (actual fee depends on whether or not the property is located in a "Nitrogen Sensitive Area" – both the Plus parcels and the Nantucket Harbor Shimmo parcels are in Nitrogen Sensitive Areas and would be subject to the \$500 connection fee (with connection mandated within 6 months – unless a variance is sought and approved by the Board of Health).
- c. **Sewer User Fee** - Annual cost of maintaining the Town sewer system currently this fee is approximately \$1,200 per year.

d. **Privilege Fee** – A fee established as of April 24, 2005 intended to offset the costs of upgrades to the Surfside wastewater treatment facility made in 2005-2006 as a result of additional properties needing to be added to the capacity of the facility – current privilege fee is \$6,322.

**8. *I have a main house and a cottage on my property – do I have to pay two betterments?***

Yes. Each dwelling unit is subject to the betterment. It is currently proposed that the second dwelling is charged one-half of the Sewer Equivalent Unit (SEU) (as noted in Question 6, above).

**9. *Is there any limit on the amount of a betterment that can be charged a particular property?***

Regardless of the method of assessment used, the amount of the betterment is limited to the actual increase in value to the parcel as a result of the sewer service. The betterment must be reasonable and proportional and may not produce an assessment largely in excess of the increase in value to the parcel as a result of the improvement. A property owner may challenge the amount of betterment on the basis of the “reasonable and proportional” standard by first applying to the Sewer Commissioners for an abatement and potentially seeking review of the abatement decision in court.

An assessment based on sewer units (uniform unit method) is more likely to be determined to be reasonable and proportional.

**10. *How many dwelling units are there on the island and how many are currently connected to sewer? And, how many additional properties would be connected with this project?***

There are approximately 11,000 dwelling units on the island. Slightly more than half (5,825) are connected to sewer. There are a total of 620 connections – both actual and potential -- in both project areas (Nantucket Harbor Shimmo – 342; Plus – 278).

**11. *Under the uniform unit method, what parcels of land must be assessed a betterment?***

G.L. c. 83, s. 15 expressly states that the Town must assess a betterment under the uniform unit method based on “all existing and potential sewer units to be served.” Potential units are “calculated on the basis of zoning then in effect. Existing and potential multifamily, commercial, industrial and semipublic uses shall be converted into sewer units on the basis of residential equivalents.” Therefore, the Town should conduct a zoning analysis on each vacant parcel of land and assess the number of sewer units based on the development potential under current zoning. This would include assessing a betterment for an existing dwelling unit and on potential secondary and/or tertiary dwelling units, which are allowed as of right under the Nantucket Zoning bylaw on any parcel. In addition, all parcels, whether vacant or not, will undergo a zoning analysis to determine how many additional potential units could be added pursuant to a subdivision of the parcel or approval not required endorsement, as well as any by right uses under existing zoning, as part of the design process. For the purposes of the cost estimate for the project, assumptions included that every lot has the ability for a primary and a secondary dwelling; and, that an additional 105 new connections (63 in Nantucket Harbor Shimmo and 42 in Plus) could be created under current zoning.

The calculation of potential units should exclude any land which by reason of topography, wetlands, or other physical conditions would prevent the additional unit or units.

**12. *Can the Town defer the payment of a betterment if the sewer unit is based on potential units under current zoning?***

Yes. The Board of Sewer Commissioners has the discretion, pursuant to G.L. c. 83, s. 19, to “extend the time for the payment of such assessments upon land which is not built upon until it is built upon or for a fixed time; but interest at the rate of four per cent per annum shall be paid annually upon the assessment from the time it was made, and the assessment shall be paid within three months after such land is built upon or at the expiration of such fixed time.” The 4% percent interest collected each year can be used by the Town to pay the debt service on the bonds until such time as the betterment is paid in full.

**13. *I live on a private road. Will the Town be taking my road and/or maintaining it once the sewer has been installed?***

The Town will require easements for the installation of sewer lines in private roads. We would hope to obtain the necessary easements voluntarily rather than have to acquire them through the eminent domain taking process. The Town does not intend to take any of the affected private roads; or, maintain them going forward. The Town will resurface the affected roads but will not change the type of road (for example, dirt roads will remain dirt, paved roads will remain paved – the Town will not pave any roads that are currently dirt as part of this project).

**14. *What if I cannot afford to pay the betterment? Is there a program in place to help?***

There is a way to help defray the betterment costs to elderly property owners under Mass General Laws. If the Town adopts Massachusetts General Law, Chapter 80, Section 13B (Article 17 on the 2016 Annual Town Meeting Warrant), then a deferral may be approved as long as the elderly homeowner has been approved for deferral with the Assessor under Massachusetts General Law Chapter 59, Section 5, forty-first A.

**15. *What options are available to homeowners to pay betterments over a period of time and what interest rate is charged?***

G.L. 83, Sections 15C and 15D, which were enacted on January 16, 2016, allow municipalities to apportion betterment assessments over a 30 year period. Prior to this new law, the apportionment was limited to 20 years. Also, under the new law, the Town may apportion the principal and interest on betterment in equal payments. In addition, the new law allows the Town to charge interest on betterments at a rate up to 2% above the net rate of interest paid by the Town on the bonds issued for the project, without the requirement under the prior law that Town Meeting set the interest rate. Both sections 15C and 15D are local acceptance statutes, and are included in the warrant for acceptance at the 2016 Annual Town Meeting under Article 16.

Section 6 of Chapter 396 of the Acts of 2008 (the Nantucket Sewer Act) states that interest on betterments “shall be at the rate as may be established by the Nantucket sewer commission from time to time.” Accordingly, if Town Meeting accepts the new law, interest on betterments will be up to 2% unless the Board of Sewer Commissioners establishes a different rate.

**16. For properties that will be assessed a betterment, is it possible to provide some form of a rebate or property tax exemption?**

No. Real estate property taxes must be uniform (based solely on assessed value) unless the General Laws or a special act provide for a specific exemption or rebate.

**17. Are properties mandated to connect to the sewer once it is operational?**

Local Board of Health Regulation 69.00 mandates that parcels located in defined nitrogen sensitive areas (Nantucket Harbor Watershed, Hummock Pond Watershed, Madaket Harbor Watershed), once sewer is operational and available for connection, must connect within 6 months. All other areas have 2 years to connect from the date of notification that the sewer is available. Properties failing to connect within the required timeframe are subject to a \$100/day fine. Nantucket Harbor Shimmo and Plus are located within the Nantucket Harbor Watershed and are considered nitrogen sensitive areas. Depending upon the circumstances of an individual property, it may be possible to seek a variance from the Board of Health to extend the connection time frame.

**18. If I recently replaced or repaired my septic system, do I still have to connect when sewer becomes available, and pay a betterment?**

Yes; however, we have not yet started the design of the proposed sewer extensions, which will take upwards of a year and then construction is not planned to start with the first phase (Nantucket Harbor Shimmo) until 2017 and second phase (Plus) in 2019. With construction expected to take about 2 years per phase sewer won't be operational in the first phase until approximately 2019. This affords any property owner who has already replaced a system at least 3-4 years of additional use.

The cost of a new conventional septic system is estimated between \$10,000 - \$25,000 but varies based on site specific conditions. The cost of a new Innovative/Alternative (I/A) system is estimated between \$30,000 - \$70,000. The estimated life of septic systems is approximately 20 years (with proper maintenance). Once a septic user is connected to sewer the future costs of septic system replacement, repair or upgrade are eliminated.

**19. What forms of relief could the Town provide to a homeowner who is otherwise subject to a betterment assessment but who has recently installed a Title 5 compliant septic system?**

Board of Health local regulation (69.00) (referenced above) mandates connections to the Town's sewer system once sewers become available to a particular property; however, the Board of Health may consider a variance request for a delayed connection to the sewer system on a case by case basis. Such a regulation would enable a property owner to avoid the payment of the sewer connection fee and the periodic sewer use charges for a period of time. A Board of Health regulation could not, however, delay the payment of a betterment, which must be assessed against all properties abutting a way in which the new sewer is installed regardless of whether the homeowner chooses to take advantage of any regulation that allows a delayed connection. Furthermore, it is doubtful that the Town could through either a bylaw or as part of the betterment policy established by the Board of Sewer Commissioners provide a reduced assessment or deferral of all or a part of a betterment assessment to a property owner that has a newly installed septic system. This is because c. 83 requires that all properties to be served by a new sewer must be treated equally in terms of paying a betterment assessment and such assessments must be proportional under either the uniform unit or fixed uniform rate methodologies. However, the Town could, through special



legislation, establish a reduced betterment to be paid up front with a delayed payment of the second half of the assessment upon connection.

**20. *Is there any way to find out what my betterment cost will be?***

An informational tool is available <http://www.nantucket-ma.gov/DocumentCenter/View/11542> for an individual homeowner to get a general idea of their betterment. Click on the link shown or type it in to your browser to access it. You must have Excel in order to access it. **Final numbers remain subject to final project costs and the zoning and property analyses noted above.**

**21. *Are there any means to lower the betterment costs?***

There is no doubt that these costs are significant. The Town has worked diligently to research all possible avenues to arrive at a fair and equitable way to recover the capital costs for these substantial water quality improvements. First, the zero percent loan (versus even a low-interest two percent loan) will save the Town millions of dollars over the life of these loans. Secondly, while there are several perspectives on “who should pay”, the problem is an Island-wide problem that affects all residents. The properties in the areas to be sewered are currently the major cause of nitrogen pollutants to the Island’s water resources. After much discussion, the Board of Selectmen and the Finance Committee have determined that the “25-75 split” is the fairest way to pay for the project. Inclusion in the state’s zero percent loan program will save the Town and the taxpayers and those who will be assessed betterments, millions of dollars over the course of the payback period (estimated savings approximately \$13,500,000.) The zero percent loan program is not a permanent program – it is currently authorized by the state through 2019. After that, it is not known whether or not it will be reauthorized – which is another reason why the sewer projects need to be funded sooner rather than later.

**22. *Are there any categories of land that are not subject to betterment assessments?***

Any land held by a governmental entity is not subject to a betterment assessment. Accordingly, parcels of land owned by the Town of Nantucket, the Nantucket Land Bank Commission, or the state and federal government are not subject to assessment. Any parcels that are privately owned are subject to assessment, including land owned by private non-profit corporations. This would, for example, include land owned by the Nantucket Land Council which is a private non-profit corporation. The Board of Sewer Commissioners could adopt a policy, however, which provides that land that is subject to a valid and enforceable perpetual restriction on development, meeting the requirements of G.L. c. 184, §§31 through 33, is not subject to assessment. In addition, the Board could adopt a policy that allows homeowners that have a potential secondary unit on their property to avoid the payment of a betterment assessment for the second unit by providing a development restriction to be held by the Town.

**23. *How were the Needs Areas for sewer extension determined?***

The areas (called “Needs Areas”) recommended for sewer extension are from the Town’s Comprehensive Wastewater Management Plan (CWMP) Update Report completed in 2014. Nantucket began its Comprehensive Wastewater Management Planning (CWMP) in 2000. The initial CWMP was completed in 2004 and included a Town-wide wastewater management plan that identified areas of the Island that were not long-term sustainable with on-site wastewater (septic) systems. Criteria reviewed at that time concluded that data contained in Board of Health records for Title 5 failures, major repairs, multiple system



pumping, soils and groundwater conditions and potential impacts of on-site systems to environmental resources, showed multiple areas needed to eliminate septic systems as the primary wastewater systems. When we began the CWMP in 2000, there was no knowledge of the issues that would be encountered in future years due to nitrogen enrichment to the water resources. The 2004 CWMP recommendations were made based on the criteria described above. The Commonwealth of Massachusetts then introduced the Massachusetts Estuaries Program (“MEP”), which examined nitrogen pollution in 89 estuaries (harbors, ponds, creeks, embayments) in southeastern Massachusetts, the Cape and Islands from various sources. Nantucket alone had six areas studied in the MEP including: 1) Nantucket Harbor; 2) Polpis Harbor; 3) Sesachacha Pond; 4) Madaket Harbor; 5) Long Pond; and 6) Hummock Pond.

Nantucket’s MEP reports have identified nitrogen as the largest contributor of pollution to the water resources examined in the MEP reports. Once the MEP reports were complete on Island, the state mandated that Nantucket update its 2004 CWMP to include solutions to the nitrogen pollution in the areas identified in the MEP reports. The Clean Water Act, both federal and state versions, mandates that the polluting of the waters of the Commonwealth, be eliminated and/or reduced. The standard which the state has established to measure nitrogen loads is through the issuance of a Total Maximum Daily Load (TMDL), which is a regulatory term in the U.S. Clean Water Act, describing a value of the maximum amount of a pollutant that a body of water can receive while still meeting water quality standards. The state has issued TMDLs for Nantucket Harbor, Polpis Harbor, Sesachacha Pond, Madaket Harbor/Long Pond and one is pending in Hummock Pond. In 2012, we initiated an update to the CWMP. The Update, as required, provides a long-term solution to reduce nitrogen pollution to our water resources in order to meet the established TMDLs and was completed and approved by the state in 2014. The CWMP Update provides recommendations to meet the state mandate (TMDL) with a 20-year plan. The articles on 2016 Annual Town Meeting are among the initial steps in implementing these recommendations. The MEP Reports and TMDLs can be reviewed on the Town’s website at <http://www.nantucket-ma.gov/132/Water-Quality-Initiative>.

#### ***24. Is there a priority as to how the Needs Areas are sewerred?***

There are multiple reasons why one Needs Area is proposed for sewer before another. One is based on actual “need” and where the area is located and its contribution to the nutrient pollution. Nantucket Harbor Shimmo is located directly on Nantucket Harbor and is shown to have a large impact on the pollution to the Harbor. The MEP studies examined the septic system contribution to the pollution and based on the science and studies, removing the septic systems from this area, in coordination with other efforts such as the Jetties reconstruction, fertilizer reduction and managing stormwater runoff -- will all reduce the nitrogen pollution to the Harbor and work together to meet the TMDL. The Plus area is tributary to the Nantucket Harbor Watershed and again, is a direct influence to the nitrogen pollution. The priority of sewerred these areas is directed toward meeting the TMDLs issued for Nantucket Harbor.

Other reasons for setting priorities are more technical. For example, in the Somerset and Madaket/Warren’s Landing Needs Areas, the sewer infrastructure needed in order to travel to the Surfside WWTF is located within the Somerset Needs Area. The Somerset Needs Area is located partially within a MEP area, but on its own would be prioritized below that of Madaket/Warren’s Landing criteria-wise, however, it makes technical

sense to sewer Somerset as a priority as it will provide the necessary physical infrastructure transmission for Madaket/Warren's Landing.

There are also funding priorities and how the Town qualifies for the zero percent state loan that will change priorities. Phasing several areas together, as was done with the project before 2016 Annual Town Meeting. One area itself did not meet the state requirements for the state loan, but phasing two together helped meet the requirements.

There are many reasons to set priorities with some more evident than others.

**25. *Will sewers allow for increased development in the designated areas?***

There is a certain amount of new growth that may happen as a result of sewers, but the Town addressed many of these concerns with revised zoning in recent years. Projected flows to the Surfside Wastewater Treatment Facility are based on a complete buildout of all the Needs Areas tributary to Surfside. The availability of sewer will not allow more development that zoning allows.

**26. *Instead of sewerage, why can't septic users switch to tight tanks?***

Tight tank usage is governed by the Massachusetts Title 5, at 310 CMR 15.000, specifically at 15.260. Tight tanks are similar to septic tanks, except that they have no outlet and must be pumped out at regular, frequent intervals. Title 5 strongly discourages the use of tight tanks, but they are allowed in situations where an existing system has failed and there is no other feasible alternative. Tight tanks are not allowed for new construction or increases in design flow. According to the Regulation at 15.260, "Approval of a tight tank may be granted only to eliminate a failed on-site system when no other feasible alternative to upgrade the system in accordance with 310 CMR 15.201 through 15.293 exists".

The Town worked with MassDEP in establishing areas where no feasible alternative exists and those areas where tight tanks are allowed are clearly defined in Local Regulation 49.00, Madaket Tight Tank Policy. A tight tank is considered a "last resort". There are but a few of these areas on Island. The Board of Health is the local jurisdiction, with MassDEP approval.

**27. *Are there other means to meet the TMDLs that could allow the Town to delay or not proceed with the sewer projects?***

No. These projects are not optional. Other means to reduce the TMDLs will not be enough. Other means include: fertilizer reduction -- landscapers and property owners must significantly reduce the use of fertilizers but even so nitrogen from septic systems must also be removed/reduced; rehabilitation of the Jetties (this may increase tidal flow/currents in Nantucket Harbor but models show that it is not enough on its own to have a substantial impact), stormwater management -- some projects have been completed, one is in progress, more are planned but again, this is only one component to a whole approach. Other options which have been explored include tight tanks (see above) and package treatment plants (small wastewater treatment systems that treat the wastewater of a small area of properties). Package plants are not viable because there is not enough room to fit them into any one area. While they are small, treating flows of 15,000 gallons per day and up, they would require land, infrastructure and maintenance. The Town of Falmouth is currently operating a pilot program for a new method of nitrogen removal in a certain area with certain soil and topography characteristics -- many towns, including us, are monitoring the program with interest; however, it will

take a number of years for the technology to be proven, accepted, and permittable. We do not have that time to wait.

If the Town does not take action that will bring its TMDLs into compliance, we can expect the state to mandate changes – on the state’s schedule; and, without the benefit of zero percent loans. The Town must take action on its own, beginning now. Clean water is essential to the Island’s economy and quality of life.

Additionally, the zero percent loan program currently expires in 2019. Any delays in this project could result in loss of the zero percent loan which would add millions of dollars (estimated \$13,500,000) to the project cost.

***28. How many more projects are there and where are they?***

The complete list of projects is contained in the CWMP Update. The next likely projects are Somerset and Madaket/Warren’s Landing Needs Areas – there has been discussion about putting those projects forward at a fall 2016 special town meeting.

**March 25, 2016 -- Updated Questions:**

***Why are betterments being recommended at all? Why can’t the entire cost be borne by the taxpayers?***

The funding of the sewer project has been discussed extensively. There are obviously different perspectives on how the project(s) should be paid for. The Sewer Planning Work Group recommended a split of 50-50 (50% betterments, 50% tax base); the Board of Selectmen initially recommended a split of 60-40 (60% betterments, 40% tax base); the Board and Finance Committee then reached agreement on a 25-75 split (25% betterments, 75% tax base). There is a view that while properties in the Needs Areas would be assessed a betterment, those properties also will no longer be incurring the inevitable costs associated with septic systems (repair, maintenance, upgrades, replacement), while those in non-Needs Areas will continue to incur those costs. Further, it is well-documented that septic systems are contributing nitrogen loads to Island estuaries, including the harbors – the Town is now mandated to eliminate or reduce the pollution. While property owners were not deliberate in contributing to the pollution, they have a responsibility now that it is known and documented, to contribute to the restoration. kara

***How does property “benefit” from being sewerred?***

A sewerred property provides for:

- full use of the property that a septic system may not be able to provide (ie, additional bedrooms)
  - additional use of the property, if the septic system is removed (ie, additional useable space for accessories, such as pools or other structures that could not otherwise be installed with a septic system taking up that space)
  - protection from contamination of private well water in areas without public water
  - 100% reduction of nitrogen pollution from the septic system
- no further need for septic system maintenance, upgrades, repairs, replacement.

***What is the Town doing to enforce the Fertilizer Regulations?***

The fertilizer regulations are difficult to enforce for constitutional and legal reasons (such as entering private property for non-criminal purposes). Education has been more of a focus, although an enforcement program began in 2015. In partnership with the Nantucket Land Council, brochures and training have been made available and the Natural Resources department has a licensing program underway. Recently, the Board of Health established an advisory group to discuss issues in enforcement (i.e. access to property, complaint investigation), and will also formulate an outreach campaign to explain proper methodology to apply fertilizer and to explain the regulations to a lay person/property owner. Any proposed changes to the regulation at the advisory group will be presented to the Nantucket Planning & Economic Development Commission, as that agency is now the governing body for fertilizer regulation changes. For the upcoming enforcement season, there will be a full-time inspector available for enforcement from the Health Department, as well as continued enforcement efforts through the Natural Resources department. Current enforcement is based on an enforcement officer witnessing the violation, and issuing citations in accordance with the regulations in place.

***Dukes Road was recently sewerred at the expense of a developer; however, the residents have to pay all of the associated costs to connect (listed above) and in addition, the sewer line is a low-pressure line and pumps are required for each property in order to pump the wastewater through to the line. This cost is not listed above. Will that be an additional cost for the Article 18 sewer project?***

The sewer extensions per Article 18 are not yet designed. It is likely that not every sewer line will be a gravity line, which will likely necessitate the need for pumps at various individual properties, in low-lying areas where would likely be low-pressure lines. We anticipate that when the design plans are further along, there will be a discussion with the Board of Selectmen as to whether pumps might be required and what that cost could be and whether or not the Town would participate in any cost-sharing.

***What is the entire cost of the Capital Improvement Plan for Sewers?***

Attached is the plan as included in the CWMP update. The years in which projects are identified are, however, tentative and likely to change based on the results of the impact of sewerage on the TMDL numbers. As referenced elsewhere in these FAQs, currently it is planned that a second sewer project for Madaket/Warren's Landing and the Somerset Needs Areas will be put before a special town meeting this fall.

***Supplement to Question 17 -- Is there any way to defer connecting to the sewer if my septic system is relatively new?***

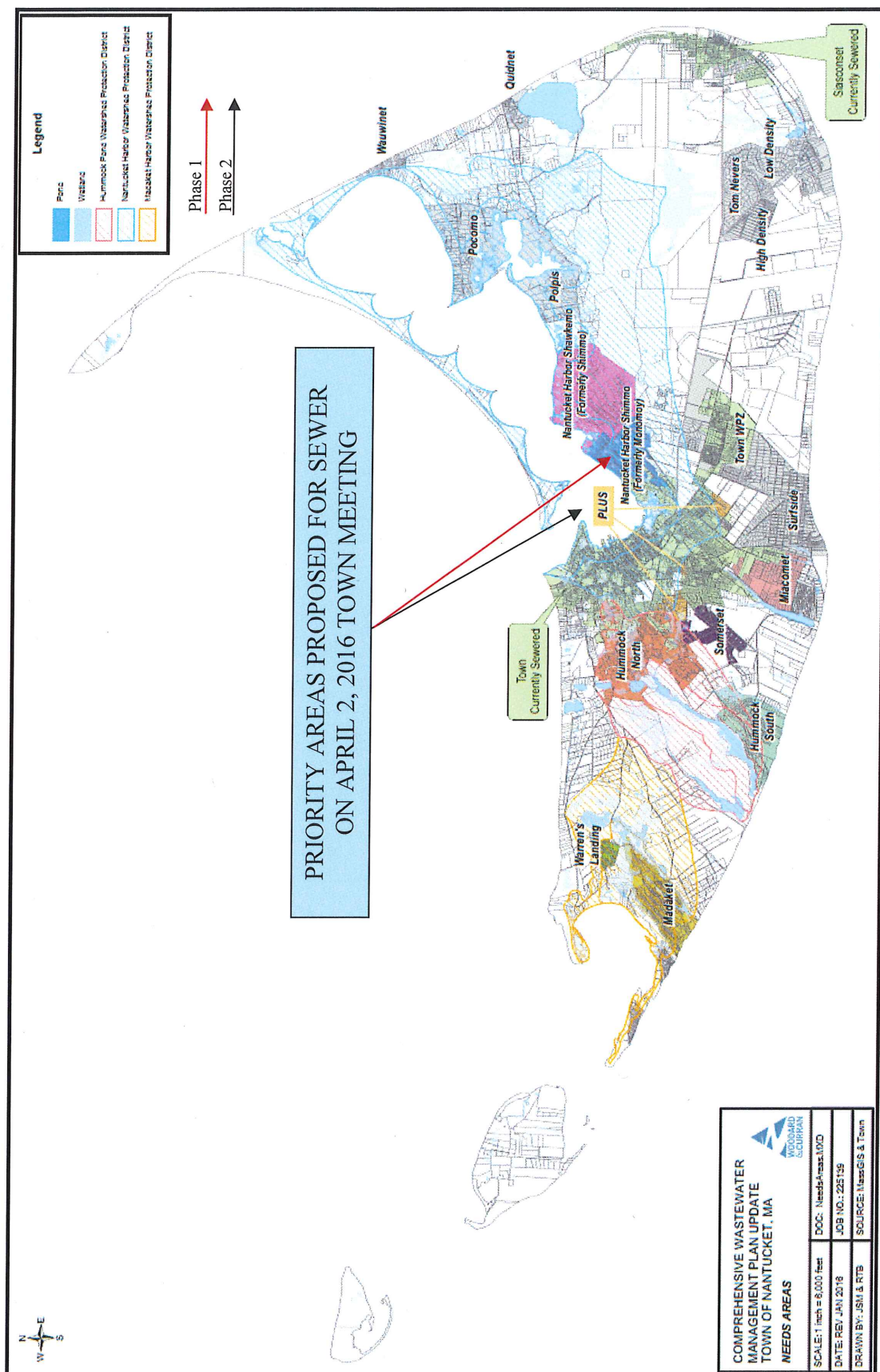
Property owners affected by any Board of Health regulation may apply for a variance. Variance request forms are available on the Town website on the Septic - Water quality page. Requests must be received at least one week in advance of a Board of Health meeting. The Board hears variance requests at an open meeting. The Board of Health has discussed variances in connection with this matter and plans to continue to hear variances on a case by case basis.

***Has the Town examined the possibility of a culvert or opening to the ocean at the Head of the Harbor to increase water circulation in Nantucket harbor?***

Not recently. However, a report from 1879 examined this possibility for a different purpose, and concluded that it was not feasible, due mostly to the fact that the tidal flows run opposite

each other outside of and inside of, the harbor and therefore would counteract the intent. There are also concerns as to the potential impact of such a project on erosion on the eastern shore of the island. Whether or not such a project could even be permitted is unclear. Further, the Town does not own property in the area where a culvert or opening might be located. For these reasons, the idea has not been pursued.





TOWN OF NANTUCKET  
DEPARTMENT OF PUBLIC WORKS  
CAPITAL IMPROVEMENT PROGRAM FY 2016-2036  
FOR CWMP UPDATE RECOMMENDATIONS

			SRF 0% Loan Duration																							
			2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036			
Comprehensive Wastewater Management Plan	Board of Health On-Site Solution	Septage Management Plan Includes System Pumping																								
			Surfside																							
			Tom Nevers High Density																							
			Tom Nevers Low Density																							
			Town-WPZ																							
			Pocomo	TBD																						
			Polpis																							
			Quidnet																							
			Wauwinet																							
	Remainder of Island																									
	Natural Resources Department Annual Water Quality Program	Townwide Sampling Program		\$ 807,600	\$ 35,000	\$ 35,000	\$ 35,000	\$ 36,100	\$ 36,100	\$ 36,100	\$ 37,200	\$ 37,200	\$ 37,200	\$ 38,400	\$ 38,400	\$ 38,400	\$ 39,600	\$ 39,600	\$ 39,600	\$ 40,800	\$ 40,800	\$ 40,800	\$ 42,100	\$ 42,100	\$ 42,100	
	Department of Public Works Off-Site Solution	Infrastructure Expansion																								
			Somerset (2017\$)	\$ 17,534,297		\$ 1,753,430	\$ 15,780,867																			
			Design	\$ 1,753,430																						
			Construction	\$ 15,780,867																						
			Madaket/Warrens Landing (2019\$)	\$ 61,096,475			\$ 6,109,648	\$ 54,986,828																		
			Design	\$ 6,109,648																						
			Construction	\$ 54,986,828																						
			Nantucket Harbor Shimmno (2017\$)	\$ 27,829,162		\$ 2,782,916	\$ 25,046,246																			
			Design	\$ 2,782,916																						
			Construction*	\$ 25,046,246																						
			Hummock Pond North*	\$ 34,226,000									\$ 3,422,600	\$ 30,803,400												
			Design	\$ 3,422,600																						
			Construction	\$ 30,803,400																						
			Hummock Pond South*	\$ 24,866,000							\$ 2,486,600	\$ 22,379,400														
			Design	\$ 2,486,600																						
			Construction	\$ 22,379,400																						
			Nantucket Harbor Shawkemo*	\$ 23,472,000				\$ 2,347,200	\$ 21,124,800																	
			Design	\$ 2,347,200																						
			Construction	\$ 21,124,800																						
			Miacomet*	\$ 20,762,000														\$ 2,076,200	\$ 18,685,800							
			Design	\$ 2,076,200																						
			Construction	\$ 18,685,800																						
			Nantucket PLUS Parcels (2019\$)	\$ 13,098,206				\$ 1,309,821	\$ 11,788,385																	
			Design	\$ 1,309,821																						
			Construction	\$ 11,788,385																						
			Pump Station Assessment, Improvements, End of Life Replacement*	\$ 11,412,500	\$ 62,500		\$ 2,100,000						\$ 2,500,000	\$ 1,250,000					\$ 1,250,000	\$ 1,250,000		\$ 1,250,000	\$ 1,750,000			
			Infrastructure Improvements - Downstream Improvements	\$ 16,990,000.00		\$ 8,076,000	\$ 3,514,000	\$ 5,400,000																		
			Surfside WWTF Improvements-Future Capacity	\$ 1,204,000.00	\$ 1,204,000																					
			Surfside WWTF Improvements - Energy Efficiency	\$ 154,000.00	\$ 154,000																					
Department of Public Works CWMP Implementation	Adaptive Management Plan - TMDL's, Oversight and Management		\$ 525,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000			

\*Costs shown in 2013 Dollars Based on CWMP Update Estimates